

### RECEIVED

**Jan 0** 8 200!

TECH CENTER 1600/2900

# ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/331,631A

Input Set : A:\CULLN23SEQ.txt

Output Set: N:\CRF3\12282000\1331631A.raw

DATE: 12/28/2000

TIME: 08:00:58

4 <110> APPLICANT: Manners, John M. Marcus, John Paul Goulter, Kenneth C. Green, Jodie L. 9 <120> TITLE OF INVENTION: ANTIHICROBIAL PROTEINS 12 <130> FILE REFERENCE: CULLN23.001APC C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/331,631A C--> 14 <141> CURRENT FILING DATE: 1999-06-21 14 <150> PRIOR APPLICATION NUMBER: PCT/AU97/00874 15 <151> PRIOR FILING DATE: 1997-12-22 17 <150> PRIOR APPLICATION NUMBER: AU PO 4275 18 <151> PRIOR FILING DATE: 1996-12-20 20 <160> NUMBER OF SEQ 1D NOS: 40 22 < 170 > SOFTWARE: FastSEQ for Windows Version 3.024 <210> SEO ID NO: 1 25 <211> LENGTH: 666 26 <212> TYPE: PRT 27 <213> ORGANISM: Macadamia integrifolia

29 <400> SEQUENCE: 1

48

30 Met Ala Ile Asn Thr Ser Asn Leu Cys Ser Leu Leu Phe Leu Lei Ser 33 1 5 32 Leu Phe Leu Leu Ser Thr Thr Val Ser Leu Ala Glu Ser Glu Phe Asp 20 25 33 30 34 Arg Gln Giu Tyr Glu Glu Cys Lys Arg Gln Cys Met Gln Leu Glu Thr 35 35 40 Ser Gly Gln Met Arg Arg Cys Val Ser Gln Cys Asp Lys Arg Phe Glu 55 37 38 Glu Asp Ile Asp Trp Ser Lys Tyr Asp Asn Gln Glu Asp Pro Gln Thr 39 70 40 Glu Cys Gln Gln Cys Gln Arg Arg Cys Arg Gln Gln Glu Sec Gly Pro 90 41 42 Arg Gln Gln Gin Tyr Cys Gln Arg Arg Cys Lys Glu Ile Cys Glu Glu 4.3 100 1.05 1.10 44 Glu Glu Glu Tyr Asn Arg Gln Arg Asp Pro Gln Gln Gln Tyr Glu Gln 45 120 125 46 Cys Gln Lys His Cys Gln Arg Arg Glu Thr Glu Pro Arg His Met Gln 47 130 1.35 140

Thr Cys Gln Gln Arg Cys Glu Arg Arg Tyr Glu Lys Glu Lys Arg Lys 150 155 50 Gln Gln Lys Arg Tyr Glu Glu Gln Gln Arg Glu Asp Glu Glu Lys Tyr 5.1 1.65 170 175 52

Glu Glu Arg Met Lys Glu Glu Asp Asn Lys Arg Asp Pro Gln Gln Arg 53 180 185 Glu Tyr Glu Asp Cys Arg Arg Cys Glu Gln Glu Pro Arg Gln 55 200 1.95 205 Gln His Gln Cys Gln Leu Arg Cys Arg Glu Gln Gln Arg Gln His Gly 56

210 2.1.5



RAW SEQUENCE LISTING DATE: 12/28/2000 PATENT APPLICATION: US/09/331,631A TIME: 08:00:58

Input Set : A:\CULLn23SEQ.txt
Output Set: N:\CRF3\12282000\1331631A.raw

58		Gly	$\operatorname{Gl}_{\mathcal{I}}$	Asp	Met		Asn	Pro	Gln	Arg	-	${\tt Gly}$	Ser	$\operatorname{Gly}$	Arg	-
59 60	225		c 1	21	c1	230	O1	G			235		***	6.1		240
61	G 1. U	U Let	G I. y	GLU	245	GIU	GLII	ser	Asp	250	PLO	TVI	TAL	Pne	255	Gitt
63	Arq	Ser	Leu	Ser		Ara	Phe	Arg	Thr		Glu	Glv	His	TIA		Val
63	,			260		5			265	.,	0.2.1			270	0.2.2	,
64	Leu	Gl u	Asn	Phe	Tyr	Gly	A.rg	ser	Lys	Leu	Leu	Arg	Ala	Leu	Lys	Asn
65			275					280					285		-	
66	Tyr		ren	Val	Leu	Leu		Ala	Asn	Pro	Asn	Ala	Phe	Val	Leu	Pro
67		290	_		4		295					300				
68		His	Leu	Asp	Ala		Ala	He	Leu	Leu		lle	Gly	Gly	Arg	
69 70	305	5.00	1	Marite	7.7.0	310					315					320
71	ALG	neu	ьγѕ	Mec	325	nis	H LS	Asp	ASI	330	Gita	ser	туг	ASII	335	GIR
72	CVS	GTV	Aen	Val		Aina	Tia	Pro	Ala		The	Thr	Dha	Tur		TIO
73	07	02,	·	340				1 1.0	345	13 1 7	1.111	1111	LIIC	350	ьсu	116
74	Asn	Arg	Asp	Asn	Asn	Glu	Arg	Leu	His	fle	Ala	L7s	Phe		Gln	Thr
75			355					360				-	365			
76	He		Thr	Pro	Gly	Gln		Lys	GLu	Phe	Phe	${\tt Pro}$	Ala	G1y	$\mathtt{Gl}\lambda$	G1n
77	_	370					375		_			380				
78		fro	G l.u	Pro	Tyr		Ser	Thr	Phe	Ser		Glu	He	Leu	Glu	
79 80	385	Lan	A a n	mbas	Clo	390	73.Tex	****	T 41.11	3 10.00	395	37-1	nh a	<i>(</i> 23	G1	400
81	HIG	rieu	11211	1 111.	405	L 11 1.	GLU	Lys	Le (i	410	GLY	V d I	PHE	ету	415	GIB
82	Arg	Glu	Glv	Val		Tle	Ara	Al.a	Ser		Glu	Gln	TIA	Ara		1.63.1
83	,			420			5		425		J	0		430	01	200
84	Thr	Arg	Asp	Asp	ser	Glu	ser	Arg	His	Trp	Hi.s	He	Arg	Arg	Gly	Gly
85			435					440					445			
86	Glu		ser	Arg	Cly	Pro		Asn	Leu	Phe	Asn	•	Arg	bro	Leu	Tyr
87		450				0.2	155					460	1			
88 89	5er	ASII	Lys	туг	GTA	470	ATa	Туr	GLU	va I.		Pro	GLu	Asp	Tyr	
90		T.4211	Gln	Aen	Met		Len	ser	Va 1	Dha	475	Ala	Λοτ	Val	Phy	480
91.	CLII	шси	O CI.	пор	485	zu. P	DCG	561	V CA .1.	490	1 1.05	r.i.u	non	VUI	495	01.11
92	Gly	Ser	Met.	Met		Pro	Phe	Phe	Asn		Arg	se.r	Thr	Lys		Val
93	-			500	-				505					510		
94	Val	Va.l	Ala	ser	Gly	Glu	Ala	Asp	Val	Glu	Met	Ala	Cys	Pro	His	Leu
95			515					520					525			
96	Ser		Arg.	Hi.s	Gly	Gly	-	G1y	Gly	G1Y	Lys	-	His	Glu	G.l u	Glu
97 98		530	Ua I	uia	m.v.	G1	535	O = 1		. 1		540	0			01
99	545	ASP	val	HIS	жук	550	111.0	Val	arg	ALd	555	ren	ser	ьys	Arg	560
100		-11e	. Val	Val	Lei		GES	/ His	Pro	. Val		Phe	Val	Stat	. 501	Gly
101					565					570					575	-
102	Asn	Glu	Asn	Leu	Leu	Leu	Phe	A.la	Phe	Gly	· lle	Asn	Ala	G ].r		Asn
103				580					585	_				590		
104	His	Glu			Leu	ı Ala	GLy	-		Arg	Asn	Val			Glr	lle
1.05			595					600					605			
106	Glu	P.no	GIn	A.l a	Met	. G.lu	Leu	Ala	Phe	Ala	Ala	Pro	Arg	Ьys	Glı	Val

# RECEIVED

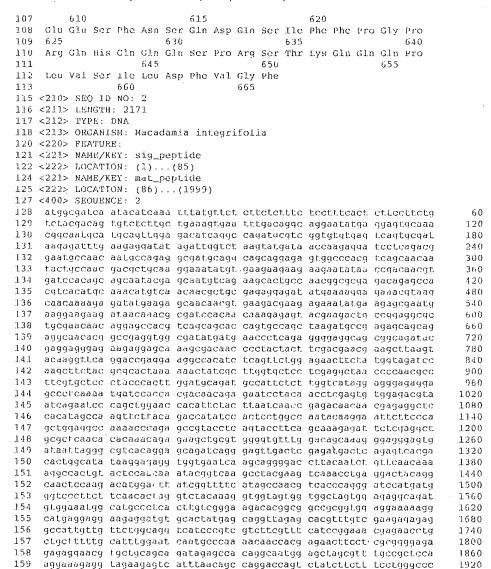
JAN 08 200!

TECH CENTER 1600/2000

RAW SEQUENCE LISTING DATE: 12/28/2600 PAPENT APPLICATION: US/09/331,631A TIME: 08:00:58

Input Set : A:\CULLN23SEQ.txt

Output Set: N:\CRF3\12282000\1331631A.raw





## RECEIVED

JAN 08 200!

TECH CENTER 1600, 2900

RAW SEQUENCE LISTING DATE: 12/28/2000 PATENT APPLICATION: US/09/331,631A TIM: 08:00:58

Input Set : A:\CULLN23SEQ.txt
Output Set: N:\CRF3\12282000\1331631A.raw

160	agg	cago	acc .	agca	acagi	to go	adda	gete	e acc	raage	caac	aac	agcc	tct -	cgt.c	tocatt	1980
161.	ctg	gaet	ticg	ttgg	cttc	ta as	agtto	ccac	a aaa	naagi	agtg	tgt	tatg	t.ag	tata	ggttag	2040
162	tageteetag eteggigiat gagagiggia agagactaag aegetaaate eelaagtaae 23														2100		
163	taa	catg	geg .	aget	tgcgi	tg ta	atge	aaat	a aa	gaqq	aaca	got:	ttcc	aac	tttaa	анаана	2160
164																2171	
166	<210> SEO 1D NO: 3																
167	<211> LENGTH: 666																
168	<212	> TY	PE:	PRT													
169	<213	> OR	GANT	SM: 3	Maca	lami.	in	tegr.	ifol	ia							
171	<220:	> FE.	ATUR.	E :													
	<221:																
173	<222	> LO	CATI	ON:	(1).	(28	3)										
	<221:																
	<pre>&lt;222&gt; LOCATION: (29)(666)</pre>																
	8 <400> SEQUENCE: 3																
179		Ala	Lie	Asn		ser	Asn	Leu	Cys	ser	Leu	Leu	Phe	Leu	Leu	Ser	
180	1				5					3.0					15		
181	Leu	Phe	Leu		Ser	Thr	Thr	Val		ren	A1a	Glu	ser		Phe	Asp	
182		_		20					25					3.0			
183	Arg	GLn		Tyr	GLu	Glu	Cys	•	Arg	Gln	Cys	Met.		Leu	Glu	Thr	
184			3.5					40					45				
185	ser	_	Gin	Met.	Arg	Arg	-	1.sV	Ser	G I.n	cys	_	Lys	Arg	Phe	Glu	
186	0.3	50	- 1				55			_		6.0		_			
187		Asp	1.10	Asp	Trp		Lys	туr.	Asp	Asn		Asp	Asp	Pro	GIn		
188	65		01.	43.3		70		_			75					80	
189 190	Asp	CYS	G I.II	(3TI)		(2 T II	Arg	Arg	Cys	_	GLI	GIR	GLU	ser	Gly	OTA	
191	3 50	010	01.5	C.L.	85	Ores	C1-	N 1	Y	90	V	~1	21.1.	G	95	a 1	
191 192	ALG	GTII	GIII	100	тул	Cys	6.1.11	Arq	105	Cys	ьуя	GIU	116		GLu	G.LU	
193	C1n	Clu	Clu		Acro	λκα	Cla	7 110		Dro	('In	C) n	cl.	110	<i>(</i> *1	Cln	
194	GII	GIU	115	TĀT	4511	MIG	G.LH	120	ASD	PIO	G T.II	GIII	1.25	IĀT	Glu	GTH	
195	Cvs	Gln		Δrσ	Cve	Gin	7) rer		Glu	Thr	62.534	D:ro		uic	Met	Gln	
196	0,0	130	O I u	111.9	~ Y - 3	(111)	135	11 1.3	0,212	1111.	0 1	140	711.9	11.1.5	me c	Gan	
197	Thr		Gln	C.In	Ara	Cvs		Ara	Δησ	Twr	Clu		Cln	Live	Arg	Tare	
198	145	010	Q.I. II	0 1.11	211.9	150	020	111 9	217.34	171.	1.55	шу.5	01.0	ny s	-	160	
199		Gin	Lvs	Ara	Tyr		Glo	d1n	Gln	Ara		Agn	Chr	Clu	Lys		
200				,	165	.,	0		5.2.11	170	.32.0		0.3.0	0,1.4	175	. 2	
201	Glu	Glu	Ara	Met		Glu	Glu	Asp	Asn		Ara	Aso	Pro	Gln	Gln	Ara	
202			,	180					185	-2.0			0	190	0		
203	G l.u	Tyr	Glu	Asp	Cys	Arg	Arq	Arg	Cys	Gl.u	Gin	Gln	Glu	Pro	Arg	Gln	
204		•	1.95		•	,	,	200	•				205				
205	Gln	Tyr	Gln	Cys	Gln	Arg	Arg	Cys	Arg	Glu	Gln	Gln	Arg	Gln	His	Gly	
 206		210		-		•	215	-	_			220	.,			•	
207	Arg	Gly	Gly	Asp	Leu	Tle	Asn	Pro	Gln	A.cq	Gly	Gly	Ser	Gly	Arg	Ty.r	
208	225	_	-	-		230				-	235	-		-	-	240	
209	Glu	Glu	Gly	Glu	G.l.u	Lys	Gln	ser	Asp	Asn	Pro	Tyr	Tyr	Phe	Asp	Glu	
210					245					250					255		
211.	Arg	Ser	Leu	ser	Thr	Aing	Phe	Arg	Thr	Glu	Glu	Gly	His	Tle	ser	Val.	
2.1.2				260					265					270			

RAW SEQUENCE LISTING DATE: 12/28/2000 PATENT APPLICATION: US/09/331,631A TIME: 08:00:58

Input Set : A:\CULLN23SEQ.txt

Output Set: N:\CRF3\12282000\I331631A.raw

							(				(200.					
213	Leu	Glu	Asn	Phe	Tyr	Gly	Arg	Ser	Lys	Leu	Leu	Arg	Ala	Leu	Lys	Asn
23.4			275					280					285			
215	Tyr	Arg	Leu	Val	Leu	Leu	G l.u	Ala	Asn	Pro	Asn	Ala	Phe	Val	Leu	Pro
216		290					295					300				
217	Thr	His	Leu	Asp	Ala	Asp	Aia	Ile	Leu	Leu	Val	Thr	Gly	GТА	Arq	Gly
218	305			'.		310					315					320
219	Ala	Leu	Lys	Met		His	Arg	Asp	Asn	Ary	Glu	se.r	туг	Asu	Leu	GLu
220					325					330					335	
221	Cys	Gly	Asp	Val	He	A.r.g	He	Pro	Ala	Gly	Thr	Thr	Phe	Tyr	Leu	He
222				340					345					350		
223	F.sn	Arg		Asn	Asn	Glu	Arg		His	He	Ala	Lys		Leu	Gln	Thr
224			355					360					365			
225	TJe		Thr	Pro	Cly	Gln		Lys	Glu	Phe	Phe		Ala	Gly	Gly	G],n
226		370					375					380				
227		Pro	Glu	Pro	Tyr	Leu	Ser	Thr	Phe	Ser	-	Glu	Ile	Letu	Glu	
228	385					390					395					400
229	A.J. á	Leu	Asn	Thr		Ala	Glu	Arg	Leu		GTA	Val	Leu	Gly		Gln
230	*	a	0.1		405	*1.		* 1 -		410	1				415	_
23.1	Arq	(5.1.11	GIÀ		rie	TLe	ser	Alla		GLD	GIU	GII	TTe		GLU	Leu
232	ml	3	*	420		0.7	a	A	425	<i>(</i> 1)	er 1	71.		430	en 1	23
233 234	3.11%	Arg	435	ASP	ser	Glu	ser	-	Arg	ттр	H 1.S	rre		Arg	GIY	GIY
234	C1n	Con		A ~~~	C1	Direct	Ti ve	440	Tau	Dho	2 02	1	445	n m n	T	(T) + 10
236	(3111	450	5e.r.	wrd	GIY	Pro	455	ASII	neu	PHE	ASII	460	Arg	PEO	neu	т. У. г.
237	Sar		Yue	Para	Cly	Gln		mar r	clu	1757	1 220		clu.	Acm	Gurn	7 1741
238	465	non	Lys	1 4 1	G.L.y	470	A1.0	171	G 1, 1,	VOIT	4.75	F 1. U	Gilu	ASD	1 A T	480
239		Len	61 n	Agn	Mert	Asp	Val	Sar	Val	Dho		λla	Acn	Tla	Whr	
240	C/ 1.17	120, 0	O I II		485	1 (12) F.	V (2 ).	G (, , 4,	* (2 )	490	3. 14. 1.2	71 I.G	71.511	a, 11,	495	CALIF
241	Gly	Ser	Met	Met		Pro	Pho	Phe	Asn		Ara	Ser	фhг	LVS		Val
242	2			500	2				505		******	1, 0.3.		510		
243	Vai	Va l	Ala		Glv	GLu	Ala	Asp		Glu	Met.	Ala	Cvs		His	Leu
244			515		-			520					525			
245	Ser	Gly	Arg	His	Gly	Gly	Arg	Arg	Gly	Gly	Lys	Arg	His	Glu	Glu	Glu
246		530					535		-	•	-	540				
247	G $L$ $u$	Asp	Val	His	Tyr	Glu	Gln	Val	Lys	Ala	Arg	Leu	Ser	Lys	Arg	Glu
248	545					550					555					560
249	Ala	Ile	Val	Val	Pro	Va.l	Gly	His	Pro	Val	Val	Phe	Val	ser	ser	Gly
250					565					570					575	
251	Asn	Glu	Asn		Leu	Leu	Phe	Ala		Gly	Tle	Asn	Ala	Gln	Asn	Asn
252				580					585					590		
253	His	G1.u		Phe	Len	Ala	Gl.y	-	G l, u	Arg	Asn	Val		Gln	Gln	rle
254			595					600					605			
255	Glu		Gln	Ala	Met	Glu		Ala	Phe	Ala	Ala		Arg	Lys	Glu	Val.
256		610					6.15					620				
257		GLu	Leu	Phe	Asn	Ser	G J. n	Asp	G l.u	Ser		Phe	Phe	Pro	Gly	
258	625	G 7 :		c11 ·	0.7	630		<b>a</b> -	• .	<b>a</b> .	635		a 2		- 1	640
259	Arg	GIN	HIS	GIN		Gln	ser	ser	Arg		Thr	Lys	G I.n	Gin		Pro
260	r	354.7	0	. 1 .	645	<b>.</b>	D. Is.	1	a 1	650					655	
261	ueu	val	ser	116	reu	Asp	Pue	va I.	G I.Y	FUG						



#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which pres nts at least one n or Xaa.

 VERIFICATION SUMMARY
 DATE: 12/28/2000

 PATENT APPLICATION: US/09/331,631A
 TIME: 08:00:59

Input Set : A:\CULLN23SEQ.txt

Output Set: N:\CRF3\12282000\1331631A.raw

```
L:14 M:270 C: Current Application Number differs, Replaced Current Application No
 L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
 L:1144 M:341 W: (46) "n" or "Xaa" used, for SEQ TD#:27
 1:1238 M:258 W: Mandatory Feature missing, <221> not found for SEO 10 \pm :31
 L:1238 M:258 W: Mandatory Feature missing, <222> not found for SEO TD#:31
 L:1238 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:31
 L:1240 M:258 W: Mandatory Feature missing, <221> not found for SEQ 1D#:31
 L:1240 M:258 W: Mandatory Feature missing, <222> not found for SEQ TD#:31
 M:340 Repeated in SeqNo=31
 L:1253 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:32
 L:1253 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:32 L:1253 M:340 W: (46; "n" or "Xaa" used: Feature required, for SEQ ID#:32
 L:1255 M:258 W: Mandatory Feature missing, <221> not found for SEQ (D#:32
 L:1255 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:32
 M:340 Repeated in SegNo=32
 L:1268 M:258 W: Mandatory Feature missing, <221> not found for SEQ TD#:33
 L:1268 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:33
 L:1268 M:340 W: (46) "n" or "Xda" used: Feature required, for SEO ID#:33
 L:1270 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:33 L:1270 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:33
 M:340 Repeated in SeqNo=33
 L:1284 M:258 W: Mandatory Feature missing, <221> not found for SEQ 1D#:34
 L:1284 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:34
 L:1284 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:34
 L:1286 M:258 W: Mandatory Feature missing, <221> not found for SEQ TDF:34
 L:1286 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:34
 M:340 Repeated in SeqNo-34
 L:1300 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:35
 T.:1300 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:35
 L:1300 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:35
 L:1302 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:35
 L:1302 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:35
 M:340 Repeated in SeqNo=35
 L:1316 H:258 W: Mandatory Feature missing, <221> not found for SEQ 1D#:36
 L:1316 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:36
 L:1316 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:36
 L:1318 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:36
 L:1318 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:36
 M:340 Repeated in SeqNo-36
 L:1331 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:37
· L:1331 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:37
 L:1331 M:340 W: (46) "n" or "Paa" used: Feature required, for SEQ ID#:37
 L:1333 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:37
 L:1333 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:37
 M:340 Repeated in SeqNo=37
 L:1346 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:38
 L:1346 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:38
 L:1346 M:340 W: (46) "n" or "Naa" used: Feature required, for SEQ ID#:38
```

VERIFICATION SUMMARY DATE: 12/28/2000
PATENT APPLICATION: US/09/331,631A TIME: 08:00:59

Input Set : A:\CULLN23SEQ.txt

Output Set: N:\CRF3\12282000\T331631A.raw

L:1348 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:38 L:1348 M:258 W: Manda\*ory Feature missing, <222> not found for SEQ ID#:38 M:340 Repeated in Se:.o=38
L:1361 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:39 L:1361 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:39 L:1361 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:39 L:1363 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:39 L:1363 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:39 M:340 Repeated in SeqNo=39
L:1376 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:40 L:1376 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:40 L:1376 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:40 L:1376 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:40 L:1376 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:40